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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,443	09/23/2003	Robert J. Motal	005950-838	9460

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EXAMINER
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DOROSHENK, ALEXA A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/667,443

Applicant(s)

MOTAL ET AL.

Examiner

Alexa A. Doroshenk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark (2,450,500).

With respect to claim 19, Clark discloses an apparatus for a Fischer-Tropsch process comprising:

a gas inlet (16);

a product outlet (21);

a reactor (17) there between including a Fischer-Tropsch catalyst (fig. 3);

wherein the reactor is operable between a temperature from 175° to 325° C (col. 7, lines 25-26) and a pressure from 1 to 20 atmospheres (col. 7, lines 33-39); and

a material (67) within the reactor (17, see figure 3) and upstream of Fischer-Tropsch catalyst (68, 69) which can bind sulfur and not substantially alter the gas stream (col. 5, line 64- col. 6, line 9).

With respect to claim 23, Clark discloses an apparatus for a Fischer-Tropsch process comprising:

a gas inlet (16);

a product outlet (21);

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a reactor (17) there between including a Fischer-Tropsch catalyst (fig. 3); wherein a material (67) is placed within the reactor (17, see figure 3) and upstream of Fischer-Tropsch catalyst (68, 69) which can bind sulfur and not substantially alter the gas stream (col. 5, line 64- col. 6, line 9).

Though Clark discloses a sulfur removal unit (12) for the gas stream prior to being fed to the reactor (17), it is held to be inherent, and admitted by applicant (p. 3, line 11-12 of applicant's own specification), that there could not be a complete removal of the sulfur in the gas stream and therefore would result in the passing a sulfur-containing gas stream over the material (67) in the reactor (17).

With respect to claims 20-22 and 24-26, Clark discloses wherein the material (67) comprises a metal or compound of a metal from group VII of the periodic table or an oxide of manganese or zinc (col. 5, line 64- col. 6, line 9).

### ***Response to Arguments***

#### **Specification**

The objection to the specification is withdrawn due to applicant's amendments.

#### **Drawings**

The objection to the drawings is withdrawn due to applicant's contention that the claims are readily understandable without drawings.

#### **35 USC 102(b)**

In response to applicant's argument that Clark does not recite that material (67) is present to bind sulfur and to substantially alter synthesis gas, a recitation of the

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intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

In this instance, the material (67) of Clark is disclosed as being of a material which applicant recognizes as functioning to bind sulfur and not substantially alter synthesis gas. Therefor, there is no structural difference in the apparatus of Clark and that of the instant claims.

Additionally, although Clark discloses a sulfur removal unit (12) for the gas stream prior to being fed to the reactor (17), it is held to be inherent, and is admitted by applicant (p. 3, line 11-12 of applicant's own specification), that there could not be a complete removal of the sulfur in the gas stream and therefore would result in the passing a sulfur-containing gas stream over the material (67) in the reactor (17). Further, since Clark is disclosed as being of a material which applicant recognizes as functioning to bind sulfur and not substantially alter synthesis gas, material (67) would also function to remove sulfur during its process.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexa A. Doroshenk  
Primary Examiner  
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